

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Clean Water Act, as amended, [33 U.S.C. §§1251 et seq. (the "CWA")], and the Massachusetts Clean Waters Act, as amended, (MGL Chap. 21, §§26-53),

**Town of Lee  
Department of Public Works  
32 Main Street  
Lee, Massachusetts 01238**

is authorized to discharge from a facility located at

**Lee Wastewater Treatment Facility  
Route 102 - Pleasant Street  
Lee, Massachusetts 01238**

to a receiving water named the **Housatonic River (Major Basin)**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective 60 days from the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on September 29, 1994.

This permit consists of 9 pages in Part I including effluent limitations, monitoring requirements, etc., and 35 pages in Part II including General Conditions and Definitions, Sludge Guidance and Attachment A, Freshwater Chronic Toxicity Test Protocol and Procedures.

Signed this 22nd day of September, 2000

/SIGNATURE ON FILE?

Linda M. Murphy, Director  
Office of Ecosystem Protection  
Environmental Protection Agency  
Boston, MA

Director  
Division of Watershed Management  
Department of Environmental Protection  
Commonwealth of Massachusetts  
Boston, MA

**PART I****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. a. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from outfall serial number 001 (treated sanitary wastewater). All samples taken in compliance with the monitoring requirements specified below, except BOD, shall be taken in the chlorine contact chamber exit channel prior to discharge from Outfall 001 into the Housatonic River. The permittee shall take all BOD samples in either the chlorine contact chamber exit channel or the channel leading into the chlorine contact chamber.

<u>Effluent Characteristic</u>	<u>Discharge Limitation</u>			<u>Monitoring Requirement</u>	
	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow, MGD	1.0 <sup>*1</sup>	—	—	Continuous <sup>*1</sup>	See Footnote <sup>*1</sup>
BOD <sub>5</sub> , mg/l	30	45	Report	2/Week <sup>*2</sup>	24-Hour Composite <sup>*3</sup>
lbs/day	250	—	—	2/Week <sup>*2</sup>	24-Hour Composite <sup>*3</sup>
TSS, mg/l	30	45	Report	2/Week <sup>*2</sup>	24-Hour Composite <sup>*3</sup>
lbs/day	250	—	—	2/Week <sup>*2</sup>	24-Hour Composite <sup>*3</sup>
pH	(See Part I.A.1.d. on Page 4)			1/Day	Grab
Fecal Coliform Bacteria, <sup>*4</sup> organisms/100 ml (April 1 - October 15)	200	—	400	1/Week	Grab
Total Residual Chlorine, <sup>*5</sup> mg/l (April 1 - October 15)	0.3	—	0.51	3/Day	Grab
Total Phosphorus, mg/l (May 1 - October 31)	1.0	—	Report	1/Week	Grab
Ammonia-Nitrogen, mg/l	Report	—	—	1/Month	24-Hour Composite <sup>*3</sup>
Total Kjeldahl Nitrogen, mg/l	Report	—	—	1/Month	24-Hour Composite <sup>*3</sup>
Total Nitrate, mg/l	Report	—	—	1/Month	24-Hour Composite <sup>*3</sup>
Total Nitrite, mg/l	Report	—	—	1/Month	24-Hour Composite <sup>*3</sup>
LC <sub>50</sub> <sup>*6,*8,*9</sup>	—	—	100%	4/Year <sup>*7</sup>	24-Hour Composite <sup>*3</sup>

Footnotes:

- \*1. For flow, report maximum and minimum daily rates and total flow for each operating date. The flow limit is an annual average. The annual average flow shall be reported each month and shall be calculated using the monthly average flow from the reporting month and the monthly average flows from the preceding 11 months.
- \*2. Sampling required for influent and effluent.
- \*3. A 24-hour composite sample will consist of at least twenty four (24) grab samples taken during one working day.
- \*4. This is a State certification requirement. The monthly average limit is expressed as a geometric mean.
- \*5. The minimum detection level (ML) for total residual chlorine (TRC) is defined as 50 ug/l. This value is the minimum detection level for chlorine using EPA approved methods found in Standard Methods for the Examination of Water and Wastes, 20th Edition, Method 4500 CL-E and G, or UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual chlorine. Sample results of 50 ug/l or less shall be reported as zero on the discharge monitoring report.
- \*6. The LC<sub>50</sub> is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
- \*7. The permittee shall conduct acute toxicity tests four times per year. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test samples shall be collected on the second Wednesday of March, June, September, and December. Results are to be submitted by the 30th day of the second month after the sample (i.e., May, August, November, and February). See Permit **Attachment A**, Toxicity Test Procedure and Protocol.
- \*8. These requirements may be modified at the written request of the permittee if there is sufficient data to indicate a minimal impact on the receiving water.
- \*9. Required by State Water Quality Certification.

## Part I.A.1. (continued)

- b. In addition to the effluent and monitoring requirements listed in Part I.A.1.a. of this permit, the discharge shall not cause or contribute to an exceedance of the current state water quality standards.

- c. Samples taken in compliance with the monitoring requirements stated above shall be taken at a point prior to mixing with other streams and shall be representative of the discharge.
  - d. The pH of the discharge shall not be less than 6.5 nor greater than 8.3 at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
  - e. The effluent shall be free from floating, suspended and settleable solids in concentrations or combinations that would: (1) impair any use assigned to class B waters, (2) cause aesthetically objectionable conditions, (3) impair the benthic biota, or (4) degrade the chemical composition of the bottom.
  - f. The effluent shall not cause or contribute to an exceedance of the water quality standard which requires that the receiving water shall be free from oil and grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.
  - g. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.
  - h. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the 1.0 MGD design flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
  - i. The permittee shall minimize the use of chlorine while maintaining adequate bacterial control.
2. All POTWs must provide adequate notice to the Director of the following:
- a. Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to Section 301 or 306 of the CWA if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
  - c. For purposes of this paragraph, adequate notice shall include information on:
    - (1) the quantity and quality of effluent introduced into the POTW; and
    - (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

**3. Prohibitions Concerning Interference and Pass-Through:**

- a. Pollutants introduced into POTW's by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.
- b. If, within 30 days after notice of an interference or pass through violation has been sent by EPA to the POTW, and to persons or groups who have requested such notice, the POTW fails to commence appropriate enforcement action to correct the violation, EPA may take appropriate enforcement action.

**4. Toxics Control**

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

**5. Numerical Effluent Limitations for Toxicants**

EPA or the MADEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the CWA, state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

**B. UNAUTHORIZED DISCHARGES**

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from outfall 001 listed in Part I.A.1. of this permit. Bypass discharges and discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs), are not authorized under this permit unless in accordance with Part II.B.4. (Bypass) of this permit and shall be reported in accordance with Section D.1.e.(1) of the General Requirements of this permit (Twenty-four hour reporting).

**C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM**

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Infiltration/Inflow

The permittee shall eliminate excessive infiltration/inflow to the sewer system. A summary report of all actions taken to minimize infiltration/inflow during the previous calendar year shall be submitted to EPA and the MADEP by February 28<sup>th</sup> of each year. This report shall also include a graph of flows to the treatment plant during the year and an analysis of I/I trends (i.e., is I/I being reduced). If there have been any unauthorized discharges from the collection system during the previous calendar year which were caused by inadequate sewer system capacity, the permittee shall also include in this report an evaluation of actions necessary to restore adequate capacity.

3. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR § 122.2).

4. Chlorination System Report

Within 3 months of the effective date of the permit, the permittee will submit a report documenting the effectiveness of the chlorination and dechlorination systems. The report will specifically address how flow variability and chlorine demand variability affect compliance with the TRC and fecal coliform limits at all times. Sampling data shall be provided to support conclusions on how hourly and daily flow and chlorine demand variability affects permit compliance. The report will include a description of the chlorination and dechlorination systems and the methods for dosage control. The report will identify all changes necessary to ensure compliance with the TRC and fecal coliform limits at all times, including equipment modifications and upgrades, operational procedures (including calibration procedures and alarm/response procedures), and sampling protocols. The report will include a schedule for implementing all of the necessary changes. An annual report shall be submitted on November 30 of each year summarizing all exceedances of the TRC and fecal coliform effluent limits during the previous year, the estimated or measured fecal coliform and chlorine discharge levels during the exceedance, and measures taken to fix the problem and to prevent future occurrences.

## **D. SLUDGE CONDITIONS**

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.

2. The permittee shall comply with the more stringent of either the state or federal (40 CFR Part 503) requirements.
3. The requirements and technical standards of 40 CFR Part 503 apply to facilities which perform one or more of the following use or disposal practices:
  - a. Land application - the use of sewage sludge to condition or fertilize the soil;
  - b. Surface disposal - the placement of sewage sludge in a sludge only landfill;
  - c. Sewage sludge incineration in a sludge only incinerator.
4. The 40 CFR Part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (i.e., lagoons, reed beds), or are otherwise excluded under 40 CFR § 503.6.
5. The permittee shall use and comply with the attached compliance guidance document to determine appropriate conditions. Appropriate conditions contain the following elements.
  - General requirements
  - Pollutant limitations
  - Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
  - Management practices
  - Record keeping
  - Monitoring
  - Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year

less than 290	1/ year
290 to less than 1500	1 /quarter
1500 to less than 15000	6 /year
15000 +	1 /month
7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR § 503.8.
8. The permittee shall submit an annual report containing the information specified in the guidance. Reports are due annually by February 19. Reports shall be submitted to the address contained in the reporting section of the permit.

**E. INDUSTRIAL USERS**

- a. Pollutants introduced into POTWs by a non-domestic source (user) shall not Pass Through the POTW or Interfere with the operation or performance of the works.
- b. The permittee shall identify, in terms of character and volume of pollutants, any significant indirect dischargers into the POTW subject to pretreatment standards under section 307(b) of the Clean Water Act and 40 CFR part 403.

**F. MONITORING AND REPORTING**

1. Reporting: Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency  
Water Technical Unit (SEW)  
P.O. Box 8127  
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection  
Western Regional Office - Bureau of Resource Protection  
436 Dwight Street  
Springfield, MA 01103

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection  
Division of Watershed Management  
Surface Water Discharge Permit Program  
627 Main Street, 2nd Floor  
Worcester, Massachusetts 01608

**G. STATE PERMIT CONDITIONS**

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection (MADEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MADEP pursuant to MGL. Chap.21, § 43.

Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any



modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.